

--40. The method of claim 39 wherein the incorrect color burst signal is added to a portion of the front porch area prior to the horizontal pulse.--

A' --41. The method of claim 39 wherein the incorrect color burst signal is added to a portion of the horizontal sync.--

--42. The method of claim 39 wherein the incorrect color burst signal is added to a portion of the back porch area following the normal color burst signal.--

--43. The method of claim 39 including:
lowering the level of a portion of the front porch area prior to the horizontal sync;
adding a positive pulse on the front porch area after the lowered front porch portion and prior to the horizontal sync; and
causing a sampling of the incorrect color burst signal in response to the lowered front porch portion, to provide the copy protection effect.--

--44. A method of modifying a video signal to provide a copy protection effect, the video signal including video lines having horizontal blanking intervals including horizontal sync, front porch and back porch areas of respective normal levels, and a normal color burst signal, comprising the steps of:

lowering the level of a selected portion of the front porch area prior to the horizontal sync to a value lower than the respective normal level to cause an erroneous early scan in a respective video line;

adding a color burst signal of incorrect phase or frequency to the horizontal sync and/or vicinity; and

causing a sampling of the incorrect color burst signal instead of the normal color burst signal in response to the erroneous early scan, to provide the copy protection effect.-

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--45. The method of claim 44 including:

adding a positive pulse on the front porch area after the lowered front porch portion and prior to the horizontal sync, wherein the lowered front porch portion and the positive pulse form a pseudo sync/automatic gain control (AGC) pulse pair.--

--46. The method of claim 44 including:

generating an average picture level (APL) signal indicative of the instant average picture level; and

varying the level of the lowered front porch portion in response to the APL signal.--

--47. A method of modifying a video signal to provide a copy protection effect, the video signal including video lines having horizontal blanking intervals including horizontal sync, front porch and back porch areas of respective normal levels, and a normal color burst signal, comprising the steps of:

lowering the level of a selected portion of the back porch area;

adding a color burst signal of incorrect phase or frequency to the back porch area in the vicinity of the lowered back porch portion; and

causing a sampling of the incorrect color burst signal in response to the lowered back porch portion, to provide the copy protection effect.--

--48. The method of claim 47 wherein the incorrect color burst signal is located after the lowered back porch portion.--

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--49. The method of claim 47 wherein the incorrect color burst signal is located prior to the lowered back porch portion.--

--50. The method of claim 47 including:
generating an average picture level (APL) signal indicative of the instant average picture level; and
varying the level of the lowered back porch portion in response to the APL signal.--

--~~51~~. A method of modifying a video signal to provide a copy protection effect, the video signal including video lines having horizontal blanking intervals including horizontal sync, front porch and back porch areas of respective normal levels, and a normal color burst signal, comprising the steps of:

lowering the level of a selected portion of the horizontal blanking interval to a value lower than said respective normal level;

causing a sample signal in response to the lowered level in the selected portion;

inserting a color burst signal of incorrect phase or frequency in a second portion of the horizontal blanking interval; and

wherein the second portion is spatially arranged in respect of the selected portion to cause the sample signal to sample the incorrect color burst signal rather than the normal color burst signal, to provide the copy protection effect.--

--52. The method of claim 51 wherein the incorrect color burst signal is added to the front porch area, to the horizontal sync signal and/or to the back porch area so as to cause the sampling of the incorrect color burst signal.--

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--53. The method of claim 52 wherein the incorrect color burst signal is added to a portion of the horizontal sync signal, and the selected portion which is lowered in level is in the front porch area.--

--54. The method of claim 52 wherein the incorrect color burst signal is added to the back porch area, and the selected portion which is lowered in level is a pseudo sync signal inserted in a portion of the back porch area prior to the incorrect color burst signal.--

--55. The method of claim 52 including:
expanding the duration of the horizontal blanking interval; and
inserting an incorrect color burst signal in a portion of the front porch area following the lowered level.--

--56. The method of claim 52 wherein:
the incorrect color burst signal is added to the horizontal sync signal, and the selected portion which is lowered in level is a pseudo sync signal on the back porch area

following the incorrect color burst signal and adjacent the beginning of the respective active video line.--

--57. The method of claim 52 including:

superimposing a positive pulse on the front porch area prior to the horizontal sync signal; and

wherein the selected signal which is lowered in level is a portion of the front porch area.--

--58. Apparatus for modifying a video signal to provide a copy protection effect during reproduction of an illegal copy, the video signal including video lines having horizontal blanking intervals with normal levels of horizontal sync, front porch and back porch and a normal color burst, comprising:

circuitry for lowering the level of a selected portion of the horizontal blanking interval to below the normal level;

subcarrier generator/combining circuits for supplying a color burst of incorrect phase or frequency in a further portion of the horizontal blanking interval; and

wherein said further portion is positioned in respect of the selected portion to cause sampling of the incorrect color burst rather than of the normal color burst, so as to provide the copy protection effect.--

--59. The apparatus of claim 58 wherein the circuitry include:

a first voltage source for lowering the normal level of a portion of the front porch to provide a modified front porch signal.--

--60. The apparatus of claim 58 wherein the circuitry include:

a second voltage source for providing a post pseudo sync signal of lowered level during the back porch.--

--61. The apparatus of claim 60 wherein the second voltage source provides a

post pseudo sync amplitude of about -10 to -30 IRE.--

--62. The apparatus of claim 61 wherein the subcarrier generator/combining circuits include:

an oscillator for supplying color burst signals of the incorrect phase or frequency;

and

a combining circuit for combining with the video signal, selected signals of the modified front porch signal, the post pseudo sync signal and/or the incorrect color burst in response to the incorrect pre sync and post sync color burst gate signals, to provide the copy protection effect.--

--63. The apparatus of claim 58 including:

a timing circuit for generating a horizontal blanking interval of expanded duration which extends into a portion of active video.--

--64. The apparatus of claim 58 wherein the circuitry for lowering the level further include:

a scene detector circuit receiving the video signal for determining the average picture level; and

transfer function circuits responsive to the determined average picture level for providing one or more voltages during the selected portion of the horizontal blanking interval, which voltages vary in level in accordance with the average picture level while providing the lowered level of the selected portion.--

--65. The apparatus of claim 58 including means for adding a positive pulse on a selected portion of the front porch area and prior to the horizontal sync.--

REMARKS

By this preliminary amendment, claims 39-65 are added to the present application.

Entry of the amendment is respectfully requested.

If the Examiner finds differences which could be resolved by telephone interview, applicant can be reached by phone at (408) 743-8496 or by facsimile at (408) 743-9659.

Respectfully submitted,



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